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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,571	10/31/2003	William P. Fornof	28679/04275 (02-004 US)	1136
24024	7590	03/27/2006	EXAMINER	
CALFEE HALTER & GRISWOLD, LLP 800 SUPERIOR AVENUE SUITE 1400 CLEVELAND, OH 44114			PHAM, MINH CHAU THI	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/698,571

Applicant(s)

FORNOF ET AL.

Examiner

Minh-Chau T. Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Dickson (5,564,401).

Dickson teaches an oil separator (520) for an internal combustion engine (510) (see col. 6, lines 45-47) comprising a fixture (792, 794) for mounting the oil separator (520) to a vehicle, an oil separator cartridge (760) connected with the fixture for coalescing oil in air supplied to the oil separator, and a valve (780) for removing coalesced oil from the oil separator (520) (see details of Fig. 7A, col. 6, lines 62-67, col. 7, line 66 through col. 8, line 12, col. 9, lines 38-55).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

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under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-13, 16-25, 27 and 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickson (5,564,401), in view of Betts (5,476,073).

Dickson discloses an oil separator (520) for an internal combustion engine (510) (see col. 6, lines 45-47) comprising a fixture (792, 794) for mounting the oil separator (520) to a vehicle, an oil separator cartridge (760) connected with the fixture for coalescing oil in air supplied to the oil separator, and a valve (780) for removing coalesced oil from the oil separator (520) (see details of Fig. 7A, col. 6, lines 62-67, col. 7, line 66 through col. 8, line 12, col. 9, lines 38-55). Claims 2-13, 16-25, 27 and 29-33 differ from the disclosure of Dickson in that the apparatus has a sump and a recycle valve connected to the sum. Betts discloses an apparatus of recycling of used oil used by compression ignition engines (4) wherein oil is pressurized by a pump (not shown) for deliverance through a filter (not shown) then to a sump (not shown) secured to the bottom of the engine crankcase (not shown) (see col. 3, lines 17-40) and a recycle valve (9) for removing oil from the valve and a control port for controlling operation of the valve (see the flowchart of Fig. 1). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to adopt the recycle means as taught by Betts in the apparatus of Dickson to effectively help conserve energy by

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using waste oil as a fuel that reduces to a degree the demand on diesel fuel and reduces waste disposal cost (col. 1, lines 44-49).

Claims 14, 15, 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickson (5,564,401), in view of Betts (5,476,073), and further in view of Walbridge et al (4,877,422).

Claims 14, 15, 26 and 28 call for a pressure relief valve creating an audible signal. Walbridge et al disclose a pressure relief valve adapted to purge air (see col. 4, lines 10-11) with means of giving a visual or audible alarm to warn the operator (see col. 4, lines 31-33). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide an audible pressure relief valve as taught by Walbridge et al in the apparatus of Dickson and Betts since it is well known in the art that the audible alarm would effectively warn the operator of potential problem in connection with the operation of the apparatus.

### ***Response to Arguments***

Applicant's arguments filed on January 13, 2006 have been fully considered but they are not persuasive.

Applicant argues that none of the prior arts discloses coalescing filter for separating the oil and a sump attached to the oil separator. The Examiner now drops all of the previous cited references and newly introduces Dickson as the primary reference to show an oil separator (520) for an internal combustion engine (510) (see col. 6, lines 45-47) comprising a fixture (792, 794) for mounting the oil separator (520) to a vehicle, an oil separator cartridge (760) connected with the fixture for coalescing oil in

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air supplied to the oil separator, and a valve (780) for removing coalesced oil from the oil separator (520) (see details of Fig. 7A, col. 6, lines 62-67, col. 7, line 66 through col. 8, line 12, col. 9, lines 38-55), as claimed.

The Examiner newly introduces Betts as the secondary reference in combination with Dickson to show an apparatus of recycling of used oil used by compression ignition engines (4) wherein oil is pressurized by a pump (not shown) for deliverance through a filter (not shown) then to a sump (not shown) secured to the bottom of the engine crankcase (not shown) (see col. 3, lines 17-40) and a recycle valve (9) for removing oil from the valve and a control port for controlling operation of the valve (see the flowchart of Fig. 1), as claimed. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to adopt the recycle means as taught by Betts in the apparatus of Dickson to effectively help conserve energy by using waste oil as a fuel that reduces to a degree the demand on diesel fuel and reduces waste disposal cost (col. 1, lines 44-49).

The Examiner newly introduces Walbridge et al as the tertiary reference in combination with Dickson and Betts to show a pressure relief valve adapted to purge air (see col. 4, lines 10-11) with means of giving a visual or audible alarm to warn the operator (see col. 4, lines 31-33), as claimed. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide an audible pressure relief valve as taught by Walbridge et al in the apparatus of Dickson and Betts since it is well known in the art that the audible alarm would effectively warn the operator of potential problem in connection with the operation of the apparatus.

Applicant's arguments with respect to claims 1-33 have been thoroughly considered but are moot in view of the new ground(s) of rejection, as discussed above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Minh-Chau Pham**  
**Patent Examiner**  
**Art Unit : 1724**  
**March 20, 2006**